A Unified Voice for Water

Desalination and Salinity

Management in the Golden State

November 27, 2013

Richard Mills
Lewis Moeller
CA Water Plan Update 2013
Strategic Water Planning Branch
Statewide Integrated Water Management
California Department of Water Resources
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SUBJECT: CalDesal Comments on Chapter 10. Desalination

Dear Mr. Mills and Mr. Moeller:

CalDesal is pleased to submit the following comments in response to the Department of Water Resources' publication of the draft California Water Plan Update for 2013 for Chapter 10 relating to Desalination.

CalDesal is a nonprofit association of water agencies and other entities that advance the use of responsible and sustainable desalination and salinity management as an important option for local and regional water supply reliability.

CalDesal would like to begin by complementing the DWR staff for their thorough research and drafting of the Desalination chapter because desalination is a complex issue that needs to be presented in an even-handed and fact-based manner, which staff has accomplished.

We would like to reiterate the following overarching issues, most of which we have previously expressed with respect to Chapter 10.

Benefits: As a threshold matter, we believe as a viable resource management strategy, the benefits of desalination should be clearly expressed. Desalination can improve overall water supply reliability, provide emergency supplies during drought periods and after extraordinary events, and help meet the health, safety, and economic needs of the State. Local desalination projects can decrease the reliance on imported water supply to meet future demand and can help diversify California's water supply portfolio.

Costs: Furthermore, desalination must be compared fairly with other water supply options. For example, it is not appropriate to compare the cost of desalination with traditional water supplies. Desalination is typically a new water supply in addition to existing, traditional water supplies for a desalination project proponent. Thus, the cost of desalination should be compared to the cost of other new supply alternatives for the next increment of water supply. When compared in the appropriate manner, the cost of desalination competes fairly well.



Energy Use: While desalination's use of energy is often criticized, energy is a component of virtually any real water being delivered to Californians. It is important to note that desalination requires a consistent energy supply. Energy from sustainable sources should be delivered by regulated and municipal electric utilities. Indeed, recognizing the need to be good stewards of public funds, the California PUC made a finding a few years ago that renewable energy is best delivered by electric utilities who can acquire energy from these types of projects at lower cost than can be developed by a water district.

Climate Change: When considering climate change and carbon footprints, DWR should adopt a broader policy that evaluates energy consumption within the context of the overall water supply and management portfolio of the agency, including water use efficiency and conservation, local groundwater management and protection, storm water conservation, wastewater recycling, and brackish and ocean desalination supplies. While recognizing the importance of energy, it should be recognized that the primary drivers for water supply are reliability and water quality.

General Water Resource Considerations: Overall, CalDesal finds the latest draft of Chapter 10 improved over earlier drafts. In this version there is much information that would be better found in a different location. For example, Chapter 10 contains a long list of environmental laws that would apply to a desalination project. Those laws will apply to any water project and would be better located in a general chapter that applies to all RMS options rather than repeating in each RMS chapter.

With respect to the Policies and Actions, we view the recommendations at the end of the chapter as an important guide for future state action relating to brackish groundwater and ocean water desalination. We generally agree with the direction of the actions laid out on pages 10-27 to 10-28 with the following modifications:

- 1. Policy No. 1: As discussed above, we believe that the benefits of desalination should be clearly expressed as part of the policies to be adopted by DWR. Desalination can improve overall water supply reliability, provide emergency supplies during drought periods and after extraordinary events, and help meet the health, safety, and economic needs of the State. Local desalination projects can decrease the reliance on imported water supply to meet future demand and can help diversify California's water supply portfolio.
- 2. Policy No. 2: We suggest deleting "[o]nly environmentally sound desalination should be implemented," as "environmentally sound" is somewhat vague and the concept is covered by the second sentence, "[r]egulatory agencies should have a strong regulatory framework with adequate resources to establish technically sound criteria that provide adequate environmental safeguards for water supply projects including desalination."
- 3. Policy No. 3: We believe that DWR should recognize that desalination requires a consistent energy source. We agree that project sponsors and water suppliers should consider utilizing energy from sustainable sources, where economically feasible, including renewable



energy developed by regulated electric utilities and municipal electric utilities. As discussed above, renewable energy can be delivered most efficiently by electric utilities.

- 4. Action Nos. 4, 6, and 7 recommend that desalination be considered using well established planning criteria and in conjunction with other resource options. These recommendations are already realized through the development of Urban Water Management Plans, Integrated Water Resource Management Plans and other local and regional planning processes. They are also applicable to the development of any new water resource option, and perhaps belong in an overarching recommendation for all RMS chapters. CalDesal agrees that the California Desalination Planning Handbook is available as a resource for helping to meet these goals.
- 5. Actions Nos. 6 and 7: Consideration of desalination should include the criteria of water supply reliability, which in our view is as important as new water supply as a reason for considering desalination.
- 6. Action No. 9: As mentioned previously, energy issues and greenhouse gas related issues should take into consideration the context of the overall water supply and management portfolio of a water agency. Again, while recognizing the importance of energy, it should be recognized that the primary drivers for water supply are reliability and water quality. Furthermore, we believe that DWR's suggested actions with respect to climate change impacts should be consistent with the California Environmental Quality Act.
- 7. Action No. 13: CalDesal suggests that this item be deleted in its entirety. Issues surrounding CECs are applicable to all water supply sources, and not just desalination.

CalDesal has participated extensively in DWR's review process of Chapter 10 and we have offered suggested changes to the staff drafts that we hope DWR finds constructive and helpful. Additionally, CalDesal and its member agencies stand ready to assist DWR staff – for instance, in obtaining desalination project data – if it would be helpful in completing the chapter.

Thank you for considering our comments and suggestions. Please let me know if you have any questions.

Sincerely, Rotald Warri

Ronald L. Davis
Executive Director